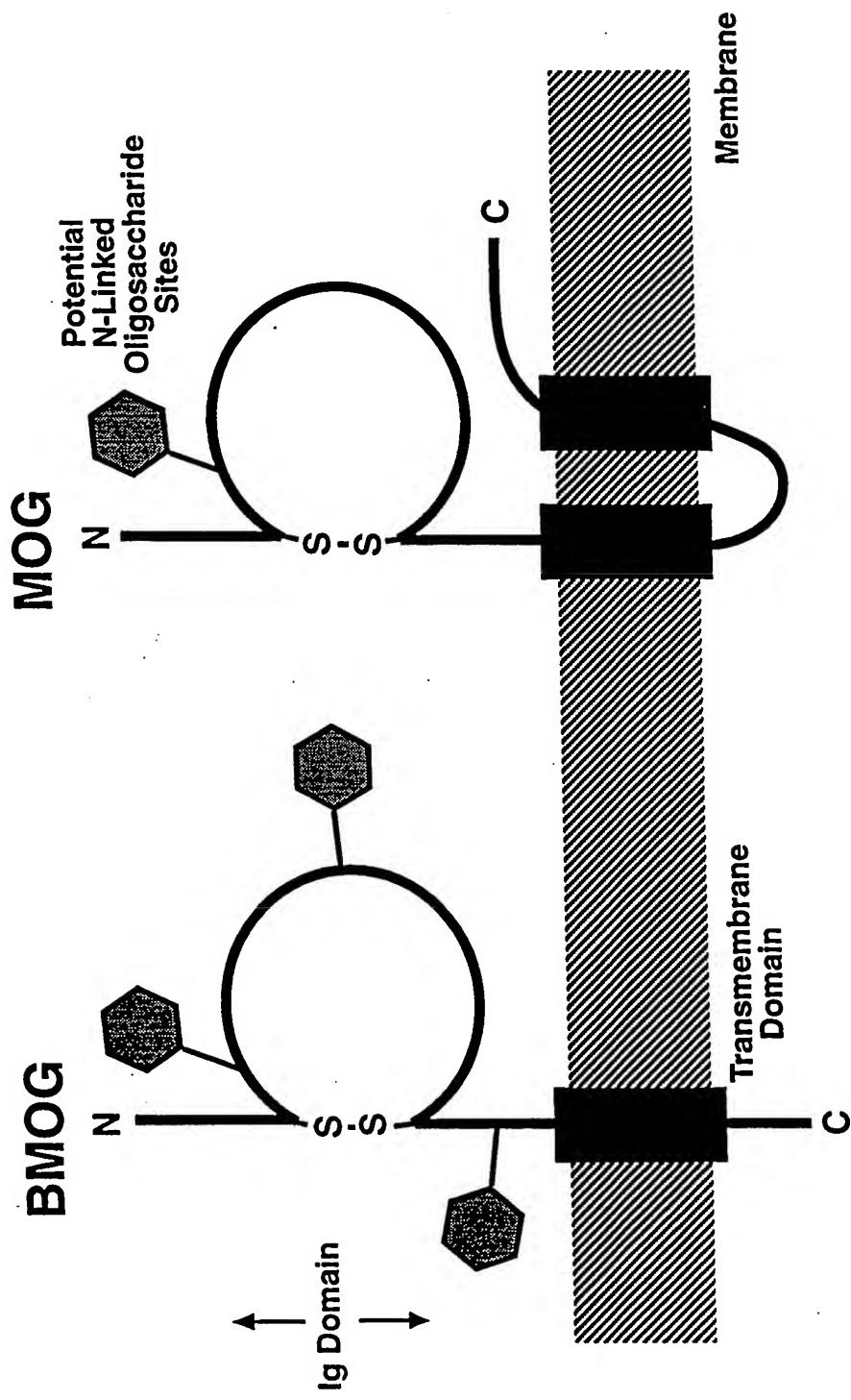


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**Fig. 1 Schematic Representation of the MOG Proteins**





EY270263636US; Applicant: Jeffrey Browning; Attorney Docket No. A041 CON;  
Application No: 10/696,256 ; Filed: October 28, 2003; Group Art Unit: Not Yet  
Assigned; For: BMOG, A NOVEL PROTEIN MEMBER OF THE MYELIN-  
OLIGODENDROCYTE GLYCOPROTEIN FAMILY AND ITS USE FOR  
IMMUNOMODULATORY PURPOSES; Attorney: Kimberley A. Gavin (Reg.  
No. 51,723) Sheet 2 of 5

## Fig. 2 Human BMOG Protein Structure

MAWLLILLIMVHPGSCALMWVSQPPEIRTEGSSAFLPCSFNASQGRILAIAGSVTIVFRDEVV  
10 20 30 40 50 60  
PGKEVRNGTPEFRGRLAPLASSRFLHDHQAEELHIRDVRGHDASTIVCRVTELGLGVGTGNG  
70 80 90 100 110 120  
TRLVVERKEHPOLGAGTVLLLRAGEYAVSELISVAVGSTVXXHGRK..  
130 140 150 160  
CHCMSGTHCHSSDGPRGVIPERPRCP  
YAKSTLSGFPOI  
CLTWKGPRROLPAVVPAPLPPPCGSSAHILLPPVPGG  
170 180 190



**Fig.3**

**Alignment of the First Extracellular Ig Domain of BMOG, MOG,  
 Butyrophilin, B-G and B7.**

hu-1C7	MAMMLLILIMVHPCGSCAL-----WVSQPPEIRTLLEGSSAFLPC-----SFNVAQGR	LAIGSVTWER-DEVVPGKEVRNGT-----PEFRGRPLASSRFLHDHQAEHLHIRDVRGHADASIVYC	RVELGLGVGTGNNGTRLYVEKEHPQLGAGTVILLRAGRYAVSFILSVAVGSTVY	hu-1C7
hu-MOG	MASLSRPSLPSCLCSFLLLLLLQVSSSYAGQFRVIGPRHPPIRALVGDEVELPCCR-----SPGKKNATG	MEVG----WYRPPFESRVVHLYRNKGKDQDGDAEQAPEYRGR-TELLKDAIGEGKVT-LRIRNVRFSDEGGFTC	FFRDHSYQEEAAME-LKVEDPEYTWYSPGVLYLAVLPVLLLOITVGLVFLCL	hu-MOG
rat-MOG	MAGVWSLPSCLLSSLLL--QLRSRSYAGQFRVIGPGHPIRALVGDEAEILPCCR-----SPGKKNATG	MEVG----WYRSPEFSRVVHLYRNKGKDQDAEQAPEYRGR-TELLKESIIGEGKVA-LRIONVRFSDEGGYT	FFRDHSYQEEAAME-LKVEDPEYWINPGVLTIALVPTILLOVSVGLVFLFL	rat-MOG
mo-MOG	MACLWSFSWPSCLPSCLLSSLLLQLSCSYAGQFRVIGPGYPIRALVGDEAEILPCCR-----SPGKKNATG	MEVG----WYRSPEFSRVVHLYRNKGKDQDAEQAPEYRGR-TELLKETISEGKVT-LRIONVRFSDEGGTC	FFRDHSYQEEAAME-LKVEDPEYWINPGVLTIALVPTILLOVSVGLVFLFL	(second Ig domain)
ch-B-G	MAFTSGCCNHPSETLPWRTLILPVLVALHLLQPGSAQITVVAAPSILRVT---AVVGQDVLRLCHL---SPCKDVRN	SDIR----WIQQRSSRLVHHYRNGVDL--GQMEFYKGR-TELLRDGLSDGNLD-LRITAVTSSDSGSYS	.....	(second Ig domain)
hu-Bu	MASSLAFLLNHFVSSLVQLLTPC---SAQFSVLGPSPGPIIAMVGEDADLPCHL---FPTMSAET	MELK---WVSSSLRQTVNTVYADGKEVEDRQSAPYRGR-TSILRDGITAGKAA-LRHNNTASDSGQLE	.....	(second Ig domain)
bov-Bu	MAVFPNSCLLAGQLLIFILLQLPKID---SAPEFDVIGPPEPILAVVGEDAELPTRL---SPNVSAKG	MELR---WREKVSPAVFVSRGQEQQEGEEMAAYRGR-VSLVEDHTAEGSVA-VRIQEVKAASDDGEYRC	.....	(second Ig domain)
hu-B7-1	MGHTRRQGTSPSPSKCPYLNFFQOLLVLAGLSHFCSGVHVTKEVKEVATLSCGH-NVSVEELAQ	TRIY---WQ-KERKMMVLTMM-SGDMN---TPEYKNR-TIF---DITN---NLSIVTIALRESDEGTYEC	.....	
hu-B7-2	MGLSNILFTMMAFLLSSGAAPLKIQAYFNETADLPCQQFANSQMQLSE	LVVF---WQ-DQENLVNEVYLGKEKFDVSFKYMGRTSF---D-SD---SWTLRHNLOQIKDKGLYQC	.....	
hu-1C7	LAIGSVTWER-DEVVPGKEVRNGT-----PEFRGRPLASSRFLHDHQAEHLHIRDVRGHADASIVYC	MEVG----WYRPPFESRVVHLYRNKGKDQDGDAEQAPEYRGR-TELLKDAIGEGKVT-LRIRNVRFSDEGGFTC	FFRDHSYQEEAAME-LKVEDPEYTWYSPGVLYLAVLPVLLLOITVGLVFLCL	hu-1C7
hu-MOG	MEVG----WYRSPEFSRVVHLYRNKGKDQDAEQAPEYRGR-TELLKESIIGEGKVA-LRIONVRFSDEGGYT	MEVG----WYRSPEFSRVVHLYRNKGKDQDAEQAPEYRGR-TELLKETISEGKVT-LRIONVRFSDEGGTC	FFRDHSYQEEAAME-LKVEDPEYWINPGVLTIALVPTILLOVSVGLVFLFL	hu-MOG
rat-MOG	MEVG----WYRSPEFSRVVHLYRNKGKDQDAEQAPEYRGR-TELLKETISEGKVT-LRIONVRFSDEGGTC	SDIR----WIQQRSSRLVHHYRNGVDL--GQMEFYKGR-TELLRDGLSDGNLD-LRITAVTSSDSGSYS	.....	(second Ig domain)
mo-MOG	SDIR----WIQQRSSRLVHHYRNGVDL--GQMEFYKGR-TELLRDGLSDGNLD-LRITAVTSSDSGSYS	MELK---WVSSSLRQTVNTVYADGKEVEDRQSAPYRGR-TSILRDGITAGKAA-LRHNNTASDSGQLE	.....	(second Ig domain)
ch-B-G	MELR---WREKVSPAVFVSRGQEQQEGEEMAAYRGR-VSLVEDHTAEGSVA-VRIQEVKAASDDGEYRC	MELR---WREKVSPAVFVSRGQEQQEGEEMAAYRGR-VSLVEDHTAEGSVA-VRIQEVKAASDDGEYRC	.....	(second Ig domain)
hu-Bu	TRIY---WQ-KERKMMVLTMM-SGDMN---TPEYKNR-TIF---DITN---NLSIVTIALRESDEGTYEC	TRIY---WQ-KERKMMVLTMM-SGDMN---TPEYKNR-TIF---DITN---NLSIVTIALRESDEGTYEC	.....	(second Ig domain)
bov-Bu	LVVF---WQ-DQENLVNEVYLGKEKFDVSFKYMGRTSF---D-SD---SWTLRHNLOQIKDKGLYQC	LVVF---WQ-DQENLVNEVYLGKEKFDVSFKYMGRTSF---D-SD---SWTLRHNLOQIKDKGLYQC	.....	(second Ig domain)
hu-B7-1				
hu-B7-2				

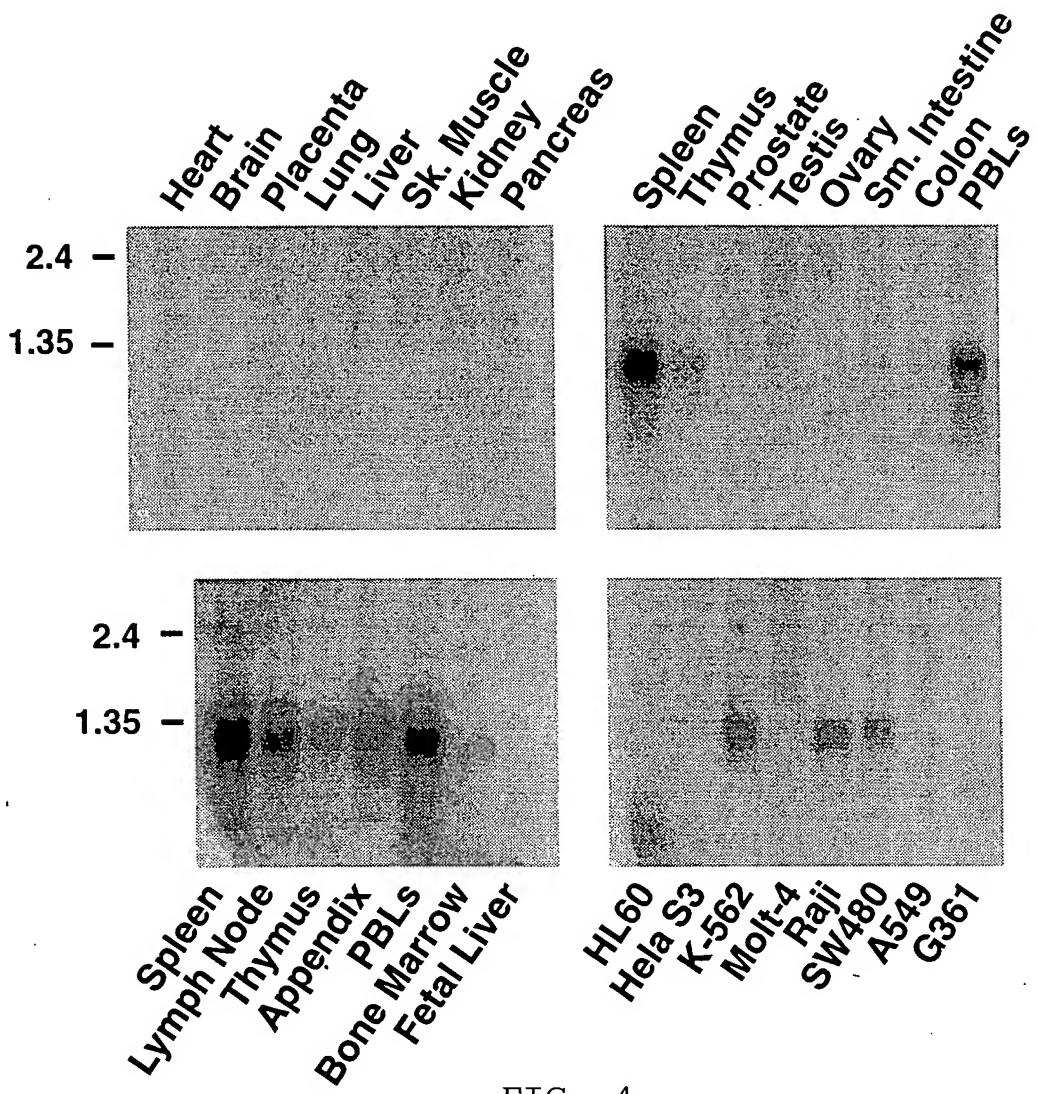


FIG. 4

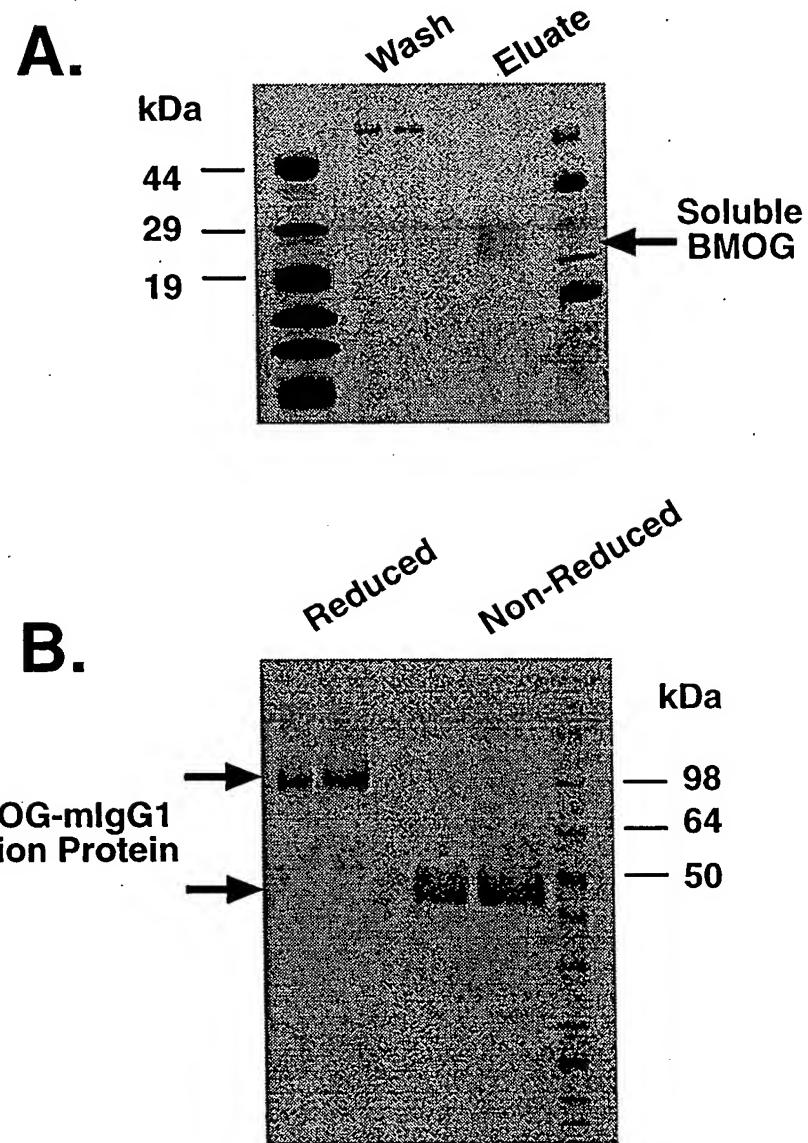


FIG. 5